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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/716,629	11/20/2003	Kang Soo Seo	46500-000558/US	6344

30593 7590 07/15/2010
HARNESS, DICKEY & PIERCE, P.L.C.
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RESTON, VA 20195

EXAMINER

SHIBRU, HELEN

ART UNIT	PAPER NUMBER
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2621

MAIL DATE	DELIVERY MODE
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07/15/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/716,629	Applicant(s) SEO ET AL.	
	Examiner HELEN SHIBRU	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-10,13,14,17,18,21,22 and 25-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-10,13,14,17,18,21-22, 25-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>05/19/2010,04/01/2010,02/17/2010</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendments filed on 05/04/2010 have been entered and made of record. Claims 1-2, 5-10, 13-14, 17-18, 21-22, and 25-34 are pending.

Response to Arguments

2. Applicant's arguments with respect to claims 1-2, 5-10, 13-14, 17-18, 21-22, and 25-34 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-2, 5-10, 13-14, 17-18, 21-22, 25, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US PG PUB 20040057700 A1) in view of Kato (US PG PUB 2002/0145702) and further in view of Sawabe (US PG PUB 2002/0176695), DeMoney (US Pat. No. 6, 064, 379) and Herley (US PG PUB 20050066352).

Regarding claim 1, Okada discloses a computer readable medium having a data structure for managing reproduction of data recorded on the computer readable medium, comprising: a data area storing at least first and second clip stream files (see paragraph 0207 and figs. 1 and 4); the first clip stream file including video data representing at least one still image (see paragraphs 0208, 0211-0212 and 0570); the second clip stream file including audio data; and a playlist area storing a playlist file (see figs. 4, 42A-B and paragraphs 0212, 0280-0283).

Claim 1 differs from Okada in that the claim further requires at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the clip stream file to reproduce the audio data, wherein the at least one playitem further includes the duration information indicating a length of time to display the at least one still image when the display mode indicates to display the at least one still image for a finite period of time.

In the same filed of endeavor Kato discloses a playlist area (see figures 7 and 14) including a playitem and a sub-playitem, the at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image (see figure 63 and paragraphs 0449-0451 and figure 97), the at least one sub-play item indicating an in-point and out-point of the clip stream file to reproduce the audio data (see figure 63), wherein the playitem further includes the duration information indicating a length of time to display the an image when the display mode indicates to display the image for a finite period of time (see paragraphs 0448, 0451 and figure 97). Therefore in light of the teaching in Kato it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by providing a playtime and sub-playitem indicating in and out point, and a finite or infinite still image display mode in order to maintain continuity when reproducing pictures recorded separately.

Claim 1 further differs from the above combination in that the claim further requires a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time, the display mode indicating to

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display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time; and a length of time to display at least one still image.

In the same field of endeavor Sawabe teaches a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time (see figure 10A, in response with specified time, figure 10B steps 21-23, and figure 11 steps 40, and 22-23, and paragraphs 0181, 0184-0185, and 0191) the display mode indicating to display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time (see figure 10A in response with infinite time, figure 10B steps 21, 24 and 30, figure 11 steps 40, and 24-25 and paragraphs 0182, 0186-0187 and 0192). Sawabe further teaches a length of time to display at least one still image (see figure 11A steps 22 and 23 where the prior art teaches specifying length of time to display the still image). Therefore in light of the teaching in Sawabe it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a display mode in order to perform the reproduction reflecting the audience's attention.

Claim 1 further differs from the above combination in that the claim further requires the playlist further includes type information which identifies whether reproduction being indicated by the at least one playitem is synchronized with reproduction being indicated by the at least one sub-playitem.

In the same field of endeavor DeMoney teaches a playlist includes a list of items (identifiers) corresponding to a specific subset of the multimedia files to be played at designated times (see col. 2 lines 34-51). DeMoney further teaches synchronizing items specified by a

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playlist (see col. 6 lines 37-44). DeMoney further teaches synchronization unit detects synchronization parameters for each item in a playlist (see col. 5 lines 15-21).

Therefore in light of the teaching in DeMoney it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combinations by adding type information which is information used to determine to synchronize play item with sub play item in order to avoid delaying items reproduction.

Claim 1 further differs from the above combination in that the claim further requires including repeat information ID which identifies whether to repeat the reproduction of the sub play item.

In the same field of endeavor Herley teaches an identifier that identifies repeating media object (see abstract). Herley further teaches the identifier information is used for generation of play lists or the like (see paragraph 0007). See also paragraphs 0084, 0095, and 0212. Therefore in light of the teaching in Herley it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination by including repeat information Id in order to handle each media objects separately.

Regarding claim 2, Kato discloses the at least one sub-play item includes an indicator indicating that the at least one playitem is related to the at least one sub-playitem such that the audio data is played in association with the at least one still image (see paragraphs 0187-0188).

Regarding claim 5, Okada discloses the first clip stream file includes video data representing more than one still image (see paragraphs 0211-0212); and the at least one playitem indicates to reproduce a number of the still images (see fig. 4 and paragraph 0212).

Claim 6 is rejected for the same reason as discussed in claim 1 above.

Regarding claim 7, Okada discloses a method of reproducing a data structure for managing reproduction of data recorded on a recording medium, comprising: reproducing at least first and second clip stream files from the recording medium, the first clip stream file including video data representing at least one still image, the second clip stream file including audio data, and reproducing a playlist file from the recording medium, the playlist file including at least one playitem and at least one sub-playitem (see paragraphs 0209, 0033, 0703 and rejection of claim 1 above).

Claim 7 differs from Okada in that the claim further requires at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the clip stream file to reproduce the audio data, wherein the at least one playitem further includes the duration information indicating a length of time to display the at least one still image when the display mode indicates to display the at least one still image for a finite period of time.

In the same filed of endeavor Kato discloses a playlist area (see figures 7 and 14) including a playitem and a sub-playitem, the at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image (see figure 63 and paragraphs 0449-0451 and figure 97), the at least one sub-play item indicating an in-point and out-point of the clip stream file to reproduce the audio data (see figure 63), wherein the playitem further includes the duration information indicating a length of time to display the image when the display mode indicates to display the image for a finite period of time (see paragraphs 0448, 0451 and figure 97). Therefore in light of the teaching in Kato it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by providing a

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playtime and sub-playitem indicating in and out point, and a finite or infinite still image display mode in order to maintain continuity when reproducing pictures recorded separately.

Claim 7 further differs from the above combination in that the claim further requires a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time, the display mode indicating to display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time.

In the same field of endeavor Sawabe teaches a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time (see figure 10A, in response with specified time, figure 10B steps 21-23, and figure 11 steps 40, and 22-23, and paragraphs 0181, 0184-0185, and 0191) the display mode indicating to display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time (see figure 10A in response with infinite time, figure 10B steps 21, 24 and 30, figure 11 steps 40, and 24-25 and paragraphs 0182, 0186-0187 and 0192). Sawabe further teaches a length of time to display at least one still image (see figure 11A steps 22 and 23 where the prior art teaches specifying length of time to display the still image). Therefore in light of the teaching in Sawabe it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a display mode in order to perform the reproduction reflecting the audience's attention.

Claim 7 further differs from the above combination in that the claim further requires the playlist further includes type information which identifies whether reproduction being indicated

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by the at least one playitem is synchronized with reproduction being indicated by the at least one sub-playitem.

In the same field of endeavor DeMoney teaches a playlist includes a list of items (identifiers) corresponding to a specific subset of the multimedia files to be played at designated times (see col. 2 lines 34-51). DeMoney further teaches synchronizing items specified by a playlist (see col. 6 lines 37-44). DeMoney further teaches synchronization unit detects synchronization parameters for each item in a playlist (see col. 5 lines 15-21).

Therefore in light of the teaching in DeMoney it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combinations by adding type information which is information used to determine to synchronize play item with sub play item in order to avoid delaying items reproduction.

Claim 7 further differs from the above combination in that the claim further requires including repeat information ID which identifies whether to repeat the reproduction of the sub play item.

In the same field of endeavor Herley teaches an identifier that identifies repeating media object (see abstract). Herley further teaches the identifier information is used for generation of play lists or the like (see paragraph 0007). See also paragraphs 0084, 0095, and 0212. Therefore in light of the teaching in Herley it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination by including repeat information Id in order to handle each media objects separately.

Regarding claim 8, Okada discloses an apparatus for recording a data structure for managing reproduction of data recorded on a recording medium, comprising: a pick up

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configured to record data on the recording medium (see paragraphs 0010, 0146 and 0151, and figure 34); a controller (see fig. 34 and paragraphs 0040 and 0146) configured to control the pick up to record at least first and second clip stream files, and a playlist file on the recording medium, the first clip stream file including video data representing at least one still image, the second clip stream file including audio data, the playlist file including at least one playitem and at least one sub-playitem (see rejection of claim 1 above and fig. 48).

Claim 8 differs from Okada in that the claim further requires at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image, the at least one sub-playitem indicating an in-point and out-point of the clip stream file to reproduce the audio data, wherein the at least one playitem further includes the duration information indicating a length of time to display the at least one still image when the display mode indicates to display the at least one still image for a finite period of time.

In the same filed of endeavor Kato discloses a playlist area (see figures 7 and 14) including a playitem and a sub-playitem, the at least one playitem indicating an in-point and out-point of the first clip stream file to reproduce the at least one still image (see figure 63 and paragraphs 0449-0451 and figure 97), the at least one sub-play item indicating an in-point and out-point of the clip stream file to reproduce the audio data (see figure 63), wherein the playitem further includes the duration information indicating a length of time to display the image when the display mode indicates to display the image for a finite period of time (see paragraphs 0448, 0451 and figure 97). Therefore in light of the teaching in Kato it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Okada by providing a

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playtime and sub-playitem indicating in and out point, and a finite or infinite still image display mode in order to maintain continuity when reproducing pictures recorded separately.

claim 8 further differs from the above combination in that the claim further requires a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time, the display mode indicating to display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time.

In the same field of endeavor Sawabe teaches a display mode indicating to display the at least one still image for a finite period of time if the at least one still image is to be displayed for a finite period of time (see figure 10A, in response with specified time, figure 10B steps 21-23, and figure 11 steps 40, and 22-23, and paragraphs 0181, 0184-0185, and 0191) the display mode indicating to display the at least one still image for infinite period of time if the at least one still image is to be displayed for an infinite period of time (see figure 10A in response with infinite time, figure 10B steps 21, 24 and 30, figure 11 steps 40, and 24-25 and paragraphs 0182, 0186-0187 and 0192). Sawabe further teaches a length of time to display at least one still image (see figure 11A steps 22 and 23 where the prior art teaches specifying length of time to display the still image). Therefore in light of the teaching in Sawabe it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combination by providing a display mode in order to perform the reproduction reflecting the audience's attention.

Claim 8 further differs from the above combination in that the claim further requires the playlist further includes type information which identifies whether reproduction being indicated

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by the at least one playitem is synchronized with reproduction being indicated by the at least one sub-playitem.

In the same field of endeavor DeMoney teaches a playlist includes a list of items (identifiers) corresponding to a specific subset of the multimedia files to be played at designated times (see col. 2 lines 34-51). DeMoney further teaches synchronizing items specified by a playlist (see col. 6 lines 37-44). DeMoney further teaches synchronization unit detects synchronization parameters for each item in a playlist (see col. 5 lines 15-21).

Therefore in light of the teaching in DeMoney it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above proposed combinations by adding type information which is information used to determine to synchronize play item with sub play item in order to avoid delaying items reproduction.

Claim 8 further differs from the above combination in that the claim further requires including repeat information ID which identifies whether to repeat the reproduction of the sub play item.

In the same field of endeavor Herley teaches an identifier that identifies repeating media object (see abstract). Herley further teaches the identifier information is used for generation of play lists or the like (see paragraph 0007). See also paragraphs 0084, 0095, and 0212. Therefore in light of the teaching in Herley it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the above combination by including repeat information Id in order to handle each media objects separately.

Regarding claim 9, the limitation of claim 9 can be found in claims 7 and 8. Therefore claim 9 is analyzed and rejected for the same reason as discussed in claims 7 and 8 above.

Claims 10 and 13 are rejected for the same reasons as discussed in claim 2 and 5 respectively above.

Regarding claims 14 and 17 are rejected for the same reasons as discussed in claims 2 and 5 above.

Regarding claims 18 and 21 are rejected for the same reasons as discussed in claims 2 and 5 above.

Regarding claims 22 and 25 are rejected for the same reasons as discussed in claims 2 and 5 above.

Regarding claims 31-34, Herley teaches the recording medium is read-only and recordable recording medium (see paragraph 0064).

5. Claims 26-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okada (US PG PUB 20040057700 A1) in view of Kato (US PG PUB 2002/0145702) and further in view of Sawabe (US PG PUB 2002/0176695), DeMoney (US pat. No. 6, 064, 379), Herley (US PG PUB 20050066352) and Saeki (US PG PUB 2001/0043790 A1).

Regarding claims 26-30, although the combination of Okada, Kato, and Sawabe DeMoney and Herley teaches the limitation of claims 1, 6, 7, 8, and 9, the prior arts fails to disclose the limitation a clip information area storing first and second clip information files, the first clip information file being associated with the first clip stream file, the first clip information file including first mapping information between a presentation time and a unit of the first clip stream file, the second clip information file being associated with the second clip stream file, the

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second clip information file including second mapping information between a presentation time and a unit of the second clip stream file for the second clip stream file.

In the same field of endeavor Sacki discloses a clip information area storing first and second clip information files, the first clip information file being associated with the first clip stream file, the first clip information file including first mapping information between a presentation time and a unit of the first clip stream file, the second clip information file being associated with the second clip stream file, the second clip information file including second mapping information between a presentation time and a unit of the second clip stream file for the second clip stream file (see figures 6, 9, col. 12 lines 1-34, col. 15 line 29-col. 16 line 4, and also figures 7A and 7B). Therefore in light of the teaching in Sacki it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the proposed combination by providing clip information file associated with clip stream file, and mapping information between presentation time in order to control the data.

Claim Rejections - 35 USC § 101

6. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

7. Claims 1-2, 5, and 26 are rejected under 35 U.S.C. 101 because the preambles of the claims recite "A computer readable medium." In the state of the art, transitory signals are commonplace as a medium for transmitting computer instruction and thus, in the absence of any evidence to the contrary and give the broadest reasonable interpretation, the scope of a "computer readable medium" covers a signal per se."

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to HELEN SHIBRU whose telephone number is (571)272-7329. The examiner can normally be reached on M-F, 8:30AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on (571) 272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/HELEN SHIBRU/
Examiner, Art Unit 2621
July 13, 2010